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Secretary Moniz Kicks Off Inaugural National Cleanup Workshop with Call for Collaboration to Address EM's Challenges

Energy Secretary Ernest Moniz commenced DOE's first-ever National Cleanup Workshop last week by highlighting recent major EM accomplishments and emphasizing the importance of working together to overcome remaining challenges in the cleanup program.

"We often lose sight of the fact that when this program was established in 1989, we had 107 sites and over 3,000 square miles. That's now down to 16 sites and less than 300 square miles," Secretary Moniz said before he pointed to important cleanup milestones in the decades ahead.

"We all need to work together," he said. "This collaboration and cooperation really is critical to our mission."

Secretary Moniz covered a range of topics — from the contributions of EM's Savannah River National Laboratory (SRNL) to the importance of safety in the cleanup work — as he spoke to the more than 350 people, including DOE employees, contractors, regulators, officials from communities around EM sites, and other stakeholders.

Held in cooperation with the Energy Communities Alliance and the Energy Facility Contractors Group, the two-day workshop just outside Washington, D.C. focused on major cleanup successes planned for the next two years, contract and project management improvement, efforts to develop new cleanup technologies, and more.

In his address, Secretary Moniz commended EM on the demolition of the K-31 Building at Oak Ridge and the recent operational closure of the seventh underground waste tank at the Savannah River Site.

He noted major upcoming project milestones, including the launch of operations at the Idaho site's Integrated Waste Treatment Unit and progress in cleaning up underground tank waste at Hanford.

Energy Secretary Ernest Moniz speaks during DOE's National Cleanup Workshop.

"We're now moving forward with a new strategy to start up the Low Activity Waste Facility, allowing us to start making glass at Hanford as soon as practicable while we continue to resolve what are some remaining technical problems," he said.

Secretary Moniz also identified the safe resumption of waste emplacement at the Waste Isolation Pilot Plant (WIPP) as one of EM's highest priorities.

"We will not lose focus on safety in terms of our recovery, and we've had some glitches, but we are on track for a 2016 startup of operations," he said.

Secretary Moniz lauded SRNL's contributions to EM, saying the laboratory has developed new and innovative approaches to help EM perform the cleanup mission more efficiently and cost effectively.

"We estimate that SRNL contributions have resulted in life-cycle savings to the Environmental Management program of well over $10 billion," he said.

In closing, Secretary Moniz asked federal and contractor employees to raise safety concerns when they have them and called for EM leaders to listen when those concerns are raised.

"The safety mission is enduring. Our workers need to feel safe and we've listened to then in terms of the on-the-ground suggestions of what we need to do to address hazards and to continue to improve our safety culture," he said.

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Assistant Secretary Regalbuto Lays out Vision, Priorities to Advance Cleanup for EM Program

DOE Assistant Secretary for Environmental Management Monica Regalbuto speaks to more than 350 people at the National Cleanup Workshop just outside Washington, D.C.

DOE Assistant Secretary for Environmental Management Monica Regalbuto shared her vision for EM, laid out cleanup priorities, and emphasized the need to better leverage technology development to reduce costs in her address at DOE's first National Cleanup Workshop.

"EM is focused on an aggressive yet achievable cleanup schedule that recognizes the unavoidable technical challenges and budget realities," she said. "While some projects will extend decades, cleanup progress is being made right now, and we have a set of significant accomplishments coming up on the horizon that will help us position EM for the future."

Regalbuto told the workshop participants, whom she described as some of the strongest EM program champions and partners in the nation, that she views the role of EM headquarters as enabling success at the field sites where cleanup work is performed.

"The EM field managers — and many of you are in attendance — are responsible for ensuring that cleanup work is being planned and accomplished in a safe and effective manner, while the role of EM headquarters is to develop the policies and the budget, and provide support and oversight to accomplish the EM mission," she said.

Regalbuto outlined major projects slated for completion in the near future. The program is working to complete the bulk of cleanup along Hanford's River Corridor. By the end of 2016, the Savannah River Site (SRS) is scheduled to complete construction of the Salt Waste Processing Facility, and the Oak Ridge site is set to demolish the last of five former uranium enrichment process buildings.

After discussing the project priorities, the Assistant Secretary made clear EM's overriding priority: safe performance of work.

"The safety and security of our workforce, our facilities, and of our cleanup projects is a condition of everything we do," she said.

Assistant Secretary for Environmental Management Monica Regalbuto described her vision for EM during the National Cleanup Workshop.

EM supports the Secretary of Energy Advisory Board's recommendation to invest more in technology development, which can address challenges in EM's mercury and technetium cleanup, Regalbuto said. EM can apply existing technologies to the cleanup, as well.

"I am also going to use every opportunity I have to leverage technologies that have been developed by other federal agencies," Regalbuto said, citing the Department of Defense, Defense Advanced Research Projects Agency, and NASA as examples.

Two areas of focus for EM are the use of robotics and establishment of test beds for new technologies or cleanup approaches.

"If NASA can put Rovers on Mars, we should be able to put a robot into some of our most hazardous, challenging environments," Regalbuto said, adding that Hanford and the Waste Isolation Pilot Plant (WIPP) are the perfect places to deploy such technologies.

The Assistant Secretary expressed hope that the workshop creates an annual forum to advocate for EM, celebrate successes, openly discuss many serious challenges, and identify opportunities for improvement and advance the program.

She also shared her experiences at WIPP, SRS, Hanford, Idaho, Oak Ridge, West Valley Demonstration Project, and other EM sites.

"I am impressed with the dedication of our workforce and our record of accomplishment," she said. "I am also impressed by the strong support we have from the communities and the states."

At the end of her address, Regalbuto asked the audience to continue to engage EM on the many critical cleanup issues facing the nation.

"I want to hear your ideas," she said.

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EM Discusses Five-Year Planning Effort at National Cleanup Workshop

At a key roundtable session of the National Cleanup Workshop, Mark Whitney, Principal Deputy Assistant Secretary for EM, described the program's initiative to develop and execute a five-year planning effort.

He noted that the next year will be one full of highlights for EM from coast to coast. At Hanford, workers are set to bring the Plutonium Finishing Plant to slab and complete retrievals at C Farm. In New Mexico, the Waste Isolation Pilot Plant is expected to resume operations. In Oak Ridge, EM is set to remove Building K-27 — the site's last gaseous diffusion uranium enrichment facility. At Savannah River, workers are scheduled to complete construction of the Salt Waste Processing Facility.

Despite the growing list of accomplishments, some of the greatest challenges lie ahead for many of the cleanup sites. With the nature of work, Whitney emphasized the importance and results that are possible through multi-year planning efforts.

"The vast majority of our cleanup projects are not one-year projects," Whitney said. "They are multi-year, complex projects that require advance planning, advance procurement strategies, and a skilled workforce. He continued, "During the past year we have worked on a five-year planning initiative that allows us to plan the program in a responsible, realistic way that results in the highest risk work getting done quickly, safely, and efficiently."

Mark Whitney, Principal Deputy Assistant Secretary for EM, speaks at the National Cleanup Workshop.

The enhanced planning efforts include keys areas that are a priority for EM during the next five years. The areas of focus include risk reduction to human health; life-cycle costs; the ability to complete projects; community and tribal input; and state and regulatory priorities.

The new approach provides managers and employees with a better understanding of the direction of the program, and it will assist each site with planning and prioritization. EM's goal for this effort is to facilitate informed decisions, achieve more efficient contract planning,

provide greater predictability for the workforce, and offer more transparent interactions with stakeholders and regulators.

Together, EM, stakeholders, and regulators can use this planning effort to guide cleanup activities, build on recent momentum, and ensure progress continues to improve the safety in communities across the country.

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Panel Celebrates EM Achievements, Prepares for More Milestones

EM Richland Operations Office Manager Stacy Charboneau kicked off the first panel at the National Cleanup Workshop, emphasizing the importance of a united team of federal and contractor employees, regulators, Tribes, communities, and other stakeholders in continued cleanup progress.

The panel, focused on major EM successes in 2016 and 2017, featured Frank Sheppard, vice president and project manager of Parsons; John Ciucci, president of CH2M Plateau Remediation Co.; Scott Sax, president of Washington Closure Hanford (WCH); and Ken Rueter, president of URS-CH2M Oak Ridge.

Charboneau echoed opening remarks by Energy Secretary Ernest Moniz and Assistant Secretary for Environmental Management Monica Regalbuto highlighting several cleanup successes and important near-term milestones EM is poised to achieve across the complex:

Idaho National Laboratory Site

- Six of eight spent nuclear fuel pools have been closed, and about 98 percent of spent nuclear fuel on site is now in dry storage;
- Eleven of 15 high-level liquid waste tanks have been emptied, cleaned and closed; and
- Continued progress toward closing the final four tanks at Idaho with the planned start of operations of the Integrated Waste Treatment Unit.

Richland Operations Office

- Tremendous progress has been made cleaning up the Columbia River Corridor Area of the Hanford Site;
- Cleanup of the N Reactor area is complete with over 100 facilities demolished and over 100 waste sites remediated, similar to four other reactor areas along the Columbia River; and
- A record amount of contaminated groundwater has been treated, with over 2.1 billion gallons treated in fiscal year 2015 in the five pump-and-treat facilities along the Columbia River and DOE's largest groundwater pump-and-treat facility — the 200 West Pump and Treat Facility.

Office of River Protection

- Progress continues on the Department's plans to begin treating tank waste at Hanford by 2022 while workers continue to safely retrieve waste from single-shell tanks;
- Construction continues on the Low Activity Waste Facility, Analytical Laboratory, and Balance of Facilities at the Waste Treatment and Immobilization Plant; and
- Thirteen of 16 C-Farm tanks have been retrieved and workers are close to completing retrieval of C-105, 102, and 111.

Oak Ridge

- Demolition of the K-31 gaseous diffusion process building is complete;

- Cleanup of K-27 — now the only remaining gaseous diffusion process building at the East Tennessee Technology Park (ETTP) — will take place in fiscal year 2016; and
- Cleanup work at Oak Ridge paves the way for economic reuse of land that will benefit the entire region.

Portsmouth/Paducah Project Office

- At the Portsmouth site, workers have removed, analyzed, and safely shipped most of the process gas equipment in the X-326 uranium enrichment process building to prepare for demolition;
- At the Paducah Site in June, workers completed demolition of the C-410 and C-420 Feed Plant complex; and
- Eleven more facilities totaling about 124,000 square feet at Paducah are slated for removal in fiscal year 2016.

Savannah River Site

- Disposed of 1.2 million gallons of low-activity salt solution liquid tank waste in fiscal year 2015;
- Workers are scheduled to complete construction of the Salt Waste Processing Facility (SWPF) in fiscal year 2016; and
- Workers recently completed the operational closure of the seventh underground waste tank.

Other EM Sites

- Progress continues on the Waste Isolation Pilot Plant (WIPP) recovery to resume limited transuranic waste disposal operations.
- Restart of operations at WIPP will enable continued progress toward dispositioning the remaining legacy defense transuranic waste across the complex.
- The West Valley Demonstration Project made significant progress in decommissioning the former nuclear fuel reprocessing center this year, with a focus on preparing for high-level waste relocation, deactivation, and demolition of site facilities and shipment of waste for off-site disposal.
- In early fiscal year 2016, the Moab Uranium Mill Tailings Remedial Action Project will reach 8 million tons of uranium mill tailings removed, or 50 percent of the total mill tailings at the site.
- In June 2015, the Lawrence Berkeley National Laboratory authorized a small business joint venture to begin a deactivation and demolition project. The project includes demolition of buildings including a chemistry annex built in the 1940s that provided expanded research laboratory space for radioactive substances.
- The Energy Technology Engineering Center made progress in its Environmental Impact Statement for remediation of Area IV of the Santa Susana Field Laboratory and the Northern Buffer Zone.

EM Richland Operations Office Manager Stacy Charboneau kicked off the first panel at the National Cleanup Workshop.

Sheppard discussed the SWPF. Once complete, the facility will reduce radioactive waste volume. Construction of SWPF is 90 percent complete and scheduled for completion in spring 2016.

Ciucci presented CH2M's recent accomplishments at the Hanford Site. The company has exceeded groundwater treatment goals and continues bringing in new technologies for removing groundwater contaminants.

Ciucci also discussed CH2M's flagship project: the scheduled demolition of the Plutonium Finishing Plant. Ciucci laid out the current challenges and recent accomplishments toward demolition. He presented the actions taken to support safety and compliance and the step-by-step process work teams will use in the coming months to bring the most hazardous risk in the EM complex to slab on grade by 2016.

Sax shared photographs of the cleanup of the River Corridor, the 220-square-mile area along the Columbia River. WCH has transported more than 11 million tons of contaminated material away from the river, demolished 323 hazardous facilities, and cleaned up 558 contaminated sites.

Rueter highlighted progress toward completing the only remaining gaseous diffusion building at ETTP in fiscal year 2016. It will mark the first completion of demolition of a gaseous diffusion complex in the world. Much of the work at Oak Ridge is being completed ahead of schedule and under budget, and is paving the way for a cleaner environment and economic reuse of land to benefit the entire region.

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Panel Views 'Big Step Increase' in Technology Development as Essential to Closing Cost Gap

Opening remarks by Energy Secretary Ernest Moniz and EM Assistant Secretary Monica Regalbuto offered a prelude to one of the major topics that reverberated during panel discussions and sideline conversations throughout DOE's National Cleanup Workshop. The prominent theme was the importance of technology development as a key factor in addressing EM's challenges.

The question arising from EM leadership's charge — how to enhance innovation and exploit the state of the art — was the topic of the EM Technology Development Program discussion.

EM Senior Technical Adviser Rod Rimando moderated a panel that included EM Deputy Assistant Secretary for Site Restoration Mark Gilbertson, Office of River Protection Manager Kevin Smith, Savannah River National Laboratory Director Dr. Terry Michalske, and Stoller Newport News Nuclear Vice President Gerald Boyd.

EM Deputy Assistant Secretary for Site Restoration Mark Gilbertson served as a member of a panel on the EM Technology Development Program.

Gilbertson outlined EM's new strategy focusing on cost reduction in the face of an anticipated $28-billion program funding gap while increasing operational efficiency and enhancing safety. The strategy is consistent with the Secretary of Energy Advisory Board Task Force on EM's Technology Development Program recommendations.

The strategy includes:

- improving the efficiency and effectiveness of existing cleanup processes;
- targeting big challenges and holding the promise of breakthrough improvements;
- fundamental research to provide knowledge and capabilities that bear on EM challenges; and
- the next generation of the EM university collaboration.

A key technological area repeatedly mentioned during the proceedings was the promise of advanced robotics in dealing with high-hazard challenges. But beyond the academic discussions loomed budgetary realities that give rise to the technology initiative while at the same time imposing practical limits on the effort.

EM's Technology Management funding as an annual percentage of total funding is currently 0.23 percent. From 2003-2010, the Accelerated Site Closure Period, it was 0.66 percent, and from the beginning of the EM program in 1989 through 2002, the Source Control and Containment Period, it was 5.49 percent. The task force recommended allocating 3 percent of the program's average $6-billion annual budget to set about a revitalization of the program.

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Panelists Update Workshop Participants on Waste Isolation Pilot Plant Recovery

EM Acting Associate Principal Deputy Assistant Secretary Frank Marcinowski, far right, speaks at the workshop as a member of a panel on the Waste Isolation Pilot Plant recovery. DOE Idaho Operations Office Deputy Manager Jack Zimmerman, left, and EM Associate Deputy Assistant Secretary for Waste Management Christine Gelles also served as panelists.

A National Cleanup Workshop panel that included a Carlsbad, N.M., official and federal and contractor employees from EM headquarters and field sites provided an update on the Waste Isolation Pilot Plant (WIPP) recovery and transuranic waste generator sites across the DOE complex.

EM Acting Associate Principal Deputy Assistant Secretary Frank Marcinowski and Phil Breidenbach, president and recovery manager of Nuclear Waste Partnership (NWP), the management and operations contractor at WIPP, discussed significant recovery milestones, including:

- interim closure of portions of the WIPP repository known as Panel 6 and Panel 7, Room 7;
- isolation of a nitrate salt-bearing waste associated with the breached waste drum; and
- radiological risk mitigation of much of the contaminated portions of the underground through use of a water spray that encapsulates contamination and the covering of contaminated floors with brattice cloth and mined salt, which prevents resuspension of contaminated particles during traffic.

Marcinowski and Breidenbach said there has been significant progress on corrective action plans (CAP) required by the DOE Accident Investigation Board (AIB) and the first safety analysis to be developed under a new DOE standard.

“WIPP is getting healthier” Breidenbach said. “The nuclear safety culture is improving and we have an unrelenting focus on values, expectations, and standards.”

EM Associate Deputy Assistant Secretary for Waste Management Christine Gelles and DOE Idaho Operations Office Deputy Manager Jack Zimmerman described the impacts of the WIPP closure on the EM program at the Idaho and Los Alamos National Laboratory (LANL) sites.

According to Gelles, EM’s Los Alamos Field Office developed CAPs in response to the AIB findings. The field office is preparing other CAPs with the National Nuclear Security Administration and EM and is focused on managing existing nitrate salt-waste streams. The

office also instituted more safety measures for drums requiring treatment similar to the breached drum at WIPP. Zimmerman said the EM program at Idaho National Laboratory has worked closely with regulators to increase storage space for waste drums.

Dick Doss, a Carlsbad City Council member, discussed the city's support for and commitment to WIPP. He stressed the importance of open and transparent communications at local town hall meetings.

WIPP has been closed since February 2014, when two isolated incidents — an underground salt haul truck fire and release of radioactive contamination — occurred. EM Carlsbad Field Office staff and contractors are developing new performance measures before announcing a target date for resumption of waste emplacement there.

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DOE Under Secretary Recognizes Residents who Helped Plan Manhattan Project Park

DOE Deputy Under Secretary for Management and Performance David Klaus discussed the Manhattan Project National Historical Park during the National Cleanup Workshop.

The Manhattan Project National Historical Park will consist of facilities at three seemingly disparate sites separated by great distances — Los Alamos, N.M., Oak Ridge, Tenn., and Hanford, Wash. — that played key roles in the creation of the atomic bomb during World War II.

At the National Cleanup Workshop, DOE Deputy Under Secretary for Management and Performance David Klaus spoke about the importance of recognizing the hard work of residents around those sites who helped bring the park closer to reality.

"The park is a testament to the dedication of [these] communities," Klaus said.

A Memorandum of Agreement outlines the roles and responsibilities the DOE and U.S. Department of Interior will have in managing the park. The agreement is set to be finalized in November, ahead of the planned target date, allowing for the park's full implementation.

While some locations at Oak Ridge and Hanford already accept visitors, the park's development will be ongoing. Each location will be interpreted and will increase the public's access to the Manhattan Project story.

The park will highlight the history of the sites before and after the Manhattan Project, as well.

"[The park] is an opportunity to recognize what came before the start of the Manhattan Project era and also to show how it still affects these communities today," Klaus said.

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EM Communicators Meet to Plan Public Outreach

EM held a communicators forum in Washington, D.C. last week in coordination with the National Cleanup Workshop. Public affairs representatives from across the DOE complex gathered to share their best strategies for public communications and transparent outreach on EM cleanup accomplishments. EM Principal Deputy Assistant Secretary Mark Whitney engaged with the communicators in the forum.

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